Barstow Marine Corps Logistics Base NPL

FFID: CA917302426100
Size: 5,688 acres
Mission: Maintain, repair, rebuild, store, and distribute supplies and equipment; formerly conducted industrial operations
HRS Score: 37.93; placed on NPL in November 1989
IAG Status: Federal facility agreement signed in October 1990
Contaminants: Heavy metals, PCBs, petroleum hydrocarbons, pesticides, herbicides, and VOCs
Media Affected: Groundwater and soil
Funding to Date: $91.5 million
Estimated Cost to Completion (Completion Year): $49.3 million (FY2029)
Final Remedy in Place or Response Complete Date for All Sites: FY2009
Five-Year Review Status: Planned

Barstow, California

Restoration Background

Marine Corps Logistics Base Barstow consists of Yermo Annex, Nebo Main Base, and the rifle range. Operations that contributed to contamination are vehicle maintenance, repair and maintenance of weapons and missile systems, and storage of petroleum and chemical products. The installation was placed on the National Priorities List (NPL) after high concentrations of trichloroethene were detected in groundwater monitoring wells.

Investigations conducted between FY83 and FY90 identified 38 CERCLA sites and 2 underground storage tank (UST) sites. Site types include sludge disposal areas, plating waste disposal areas, low-level radioactive waste storage areas, spill sites, and evaporation ponds. To facilitate cleanup efforts, in accordance with the federal facility agreement, the sites were grouped into seven operable units (OUs). OUs 1 and 2 address groundwater contamination at Yermo Annex and Nebo Main Base, respectively. OUs 3, 4, 5, and 6 address contaminated soil at 36 sites. OU7 was established for new sites.

The Navy installed an activated carbon groundwater treatment system to address volatile organic compounds (VOCs) in the Yermo drinking water system. During FY92, the installation removed 41 abandoned USTs from UST Area 1. In FY93, the installation provided potable water to nearby residents. It also removed industrial waste sludge from the oil storage/spillage and industrial wastewater treatment plant. The percolation ponds at Site 35 were aerated, and a filter was installed to remove solvents from water before it was discharged into ponds.

In FY94, the installation excavated and disposed of contaminated soil from two sites. It also completed an investigation of UST Area 2 and conducted remedial investigation and feasibility study (RI/FS) activities at all 38 sites.

During FY96, the installation completed construction of the groundwater treatment system at OU1. In FY97, it completed RI/FSs for OUs 5 and 6, signed a Record of Decision (ROD) for OUs 3 and 4, finished a remedial site evaluation and a removal action at Site 21, and completed corrective actions at UST Area 2.

In FY98, the installation completed RODs for OUs 1, 2, 5, and 6. Investigations were completed at three USTs, under UST 2. A RCRA facility assessment (RFA) report recommending 15 solid waste management units (SWMUs) for further investigation was finalized.

In FY99, remedial actions (RAs) at CERCLA Areas of Concern (CAOCs) 20 and 23 were completed. The remedial design (RD) was finalized and RA construction began for the OU1 and OU2 off-base groundwater extraction systems. Thirty UST sites were submitted for closure.

The installation formed a technical review committee, prepared a community relations plan, and established an information repository and an administrative record in FY91.

FY00 Restoration Progress

The installation closed OUs 3 and 4. CAOCs 20 and 23 are now in long-term monitoring. The CAOC 7 RA was completed, and the CAOC 35 RA began. An extended RFA field investigation for 15 SWMUs was completed, and the draft report is under negotiation. An air-sparging and soil vapor extraction (AS/SVE) system at CAOC 26 was completed. The OU1 on-base treatment system was optimized. The installation began replacing dry monitoring wells and optimizing treatment systems at Yermo, OU1.

RD for the OU1 off-base treatment system is on hold because the contaminant plume continues to decrease and RA may not be necessary. RD for the OU2 off-base system was modified and is being finalized. The installation is still awaiting closure of 32 USTs. The planned FS for Nebo North AS/SVE and the proposed plan (PP) and FS for Nebo South source cleanup were delayed until the revised and extended RFA report is finalized.

Plan of Action

- Replace dry monitoring wells at OU1 in FY01
- Complete RA at CAOC 35 and OU5 in FY01
- Complete RA report and closeout for OUs 5 and 6 in FY01
- Finalize extended RFA report (CAOC 39) and begin FS and PP for CAOCs 38 and 39, OU2, and OU7 in FY01
- Close out 32 tanks and develop corrective action plans for 5 USTs in FY01
- Sign final ROD for OUs 1, 2, and 7 in FY02
- Complete 5-year review as planned

FY01 Funding by Phase and Relative Risk